



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/486,723	05/18/2000	MICHAEL LAMLA	JEK/LAMLA	2431

7590

04/27/2005

BACON & THOMAS  
625 SLATERS LANE  
4TH FLOOR  
ALEXANDRIA, VA 22314-1176

EXAMINER
----------

AKPATI, ODAICHE T

ART UNIT	PAPER NUMBER
----------	--------------

2135

DATE MAILED: 04/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/486,723

Applicant(s)

LAMLA ET AL.

Examiner

Tracey Akpati

Art Unit

2135

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 October 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>09/30/2004</u> . | 6) <input type="checkbox"/> Other: _____  |

K

## DETAILED ACTION

1. Claims 1-14 are pending.

### *Response to Arguments*

Applicant's arguments filed 10/04/2004 have been fully considered but they are not persuasive.

2. *With respect to Claims 1 and 8, the attorney argues that contrary to the pending claims wherein communication via the two logically separated transmission channels is performed between the same components, communication according to the Caputo et al disclosure is performed between different components.* Claims 1 and 8 use the term “comprising” which includes all the limitation claimed and more. Caputo et al discloses communication between the data carrier and external device as claimed by Claim 1 and 8 on column 4, 66-67; column 5, lines 1-10. Hence communication occurs between these two components.

3. *With respect to Claims 1 and 8, the attorney argues that the novelty of his invention that is not disclosed by Caputo is to provide two logically separated transmission channels for communication between a first and second device.* The two logically separate channels are disclosed by Caputo on column 2, lines 31-33. The communications port provides a transmission channel that transports authenticating data (column 2, lines 60-65) and the data transfer path provides the transmission channel for data.

4. *With respect to Claim 2, the attorney argues that Caputo et al does not disclose a second transmission channel that modulates the signal of the first transmission channel.* Modulation of

Art Unit: 2135

the data signal transmitted by the first channel is clearly disclosed by Caputo et al on column 4, lines 25-28.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1-8, 11, 12, 14 are rejected under 35 U.S.C. 102(e) as being anticipated by Caputo et al (5878142).

With respect to Claim 1, Caputo et al meets the limitation of “a method for testing the authenticity of a data carrier having an integrated circuit by an external device with which the data carrier exchanges data” on column 6, lines 42-51 and abstract. The portable data carrier or smart card represents the data carrier. Further limitation of “providing a first transmission

Art Unit: 2135

channel for transmitting signals between the data carrier and the external device and providing a second transmission channel logically separated from the first transmission channel, the separation of the first and second transmission channels being so designed that data transmission via one transmission channel does not interfere with data transmission via the other transmission channel and the second transmission channel is activable during the total time period between activation and deactivation of the data carrier” is met on column 4, lines 66-67, column 5, lines 1-6, column 2, lines 31-33. The first transmission channel is represented by the PCMCIA connection to the personal computer while the second transmission channel is represented by the modem/modular receptacle’s connection to the telephone system. Further limitation of “having the data carrier generate a signal required for authenticity testing” is met on Fig. 5A, column 8, lines 63-67; column 9, line 1; column 2, lines 42-46. The PIN or code located within the smartcard represents the signal sent out by the smartcard. Further limitation of “transmitting the signal for authenticity testing from the data carrier to the external device or a signal required for generating the signal for authenticity testing from the external device to the data carrier at least partly via the second transmission channel; and having the external device receive the signal for authenticity testing, and deciding on the basis of the received signal whether the data carrier is authentic” is met inherently on column 9, lines 2-3. The signal sent over the modem of the telephone system represents this signal. The sender of the time varying parameter represents the external device.

With respect to Claim 2, Caputo et al meets the limitation “characterized in that the second transmission channel is provided by modulating the signal of the first transmission channel” on column 4, lines 25-28.

With respect to Claim 3, Caputo et al meets the limitation “characterized in that modulation does not impair an ISO compatibility of data exchange between the data carrier and the external device existing for the first transmission channel” on column 2, lines 31-33 and column 4, lines 66-column 5, lines 1-6. ISO compatibility is inherent.

With respect to Claim 4, Caputo et al meets the limitation “characterized in that modulation is performed in areas of the signal pattern which are not evaluated according to the ISO standard” on column 4, lines 25-28. ISO compatibility is inherent.

With respect to Claim 5, Caputo et al meets the limitation “characterized in that the changes caused by modulation in the signal of the first transmission channel are within the range of variation of the signal level permitted by the ISO standard” on column 4, lines 25-28. ISO compatibility is inherent.

With respect to Claim 7, Caputo et al meets the limitation “characterized in that the first transmission channel is a line for transmitting standard data or a line for transmitting the clock signal or a line for the supply voltage” on column 5, lines 2-5. The line is used to transmit standard data in the reference.

With respect to Claim 8, its limitation is similar to Claim 1 limitation. The major difference is that the first and second transmission channels are physically separated. This is met by Caputo et al on column 2, 31-33 and column 4, lines 66-67 and column 5, lines 1-6. Also, the ISO compatibility is inherent.

With respect to Claim 11, Caputo et al meets the limitation of “characterized in that the decision on authenticity of the data carrier is contingent on whether data exchange is possible between the devices to which the first and second transmission channels are coupled in the data carrier” on column 9, lines 12-16.

With respect to Claim 12, Caputo et al meets the limitation of “the data carrier has a first device for generating signals for data exchange between the data carrier and the external device, and the first device is adapted to be coupled to a first transmission channel; and the data carrier has a second device for generating signals required for authenticity testing of the data carrier, and the second device is adapted to be coupled to a second transmission channel and connected with the first device” on Figure 4A, 1A, 1C and column 2, lines 21-26, 31-34; and “the first and second transmission channels are separated logically or physically” on column 5, lines 2-6; and “data exchange with the second device does not interfere with data exchange with the first device and the second device is ready for generating signals for authenticity testing of the data carrier during the total time period between activation and deactivation of the data carrier” on column 5, lines 2-6 and column 8, lines 27-37.

With respect to Claim 14, Caputo et al meets the limitation of “a data carrier with a first device for generating signals for data exchange with the external device and a second device for generating and/or processing signals for authenticity testing; and an external device with a first device for generating signals for data exchange with the data carrier and a second device for generating and/or processing signals for authenticity testing” on column 8, lines 63-67, column 9, lines 1-3, 12-16. The encrypted authenticating device represents the external device. Further limitation of “a first transmission channel for transmitting signals between the first device of the data carrier and the first device of the external device; and a second transmission channel for transmitting signals between the second device of the data carrier and the second device of the external device, the first and second transmission channels being separated logically or physically and the separation of the first and second transmission channels being so designed that data transmission via one transmission channel does not interfere with data transmission via the other transmission channel, and the second transmission channel being activable during the total time period between activation and deactivation of the data carrier” on column 4, lines 66-67, column 5, lines 1-6, column 8, lines 64-67 and column 9, lines 1-3.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.



Claims 6 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Caputo et al (5878142) in view of Handelman et al (5878134).

With respect to Claim 6, Caputo et al partly meets the limitation of “characterized in that modulation and demodulation of the signal are performed in the data carrier and in the external device with the aid of a mixing/demixing device in each case” on column 8, lines 11-16, column 2, lines 21-26, column 4, lines 25-28, 41-48; Fig. 2 and 3. The presence of the modem performing the modulating suggests that demodulation must also occur so as to read data received. Hence demodulation is an inherent feature. Caputo et al does not disclose a mixing/demixing device. This is disclosed by Handelman et al on column 4, lines 65-67 and column 5, lines 1-6.

It would have been obvious to combine the teachings of Handelman et al within the system of Caputo et al because multiplexer/demultiplexer is needed to transmit/separate multiple signals through/from one transmission channel.

With respect to Claim 13, all the limitation is met by Caputo et al except the limitation disclosed below.

The limitation of “characterized in that the first device and the second device are each coupled to the transmission channels via a mixing/demixing module” is met by Handelman et al on column 4, lines 65-67, column 5, lines 1-6. The multiplexer/demultiplexer represents the mixing/demixing module.

It would have been obvious to combine the teachings of Handelman et al within the system of Caputo et al because multiplexer/demultiplexer is needed to transmit/separate multiple signals through/from one transmission channel.

Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Caputo et al (5878142) in view of Matsushita et al (4837556).

With respect to Claim 9, Caputo et al meets all the limitation except the limitation disclosed below.

The limitation of “characterized in that the contactless transmission path is realized by transmitting the data as electromagnetic, electrostatic, magnetic, acoustic or optical signals” by Matsushita et al on column 1, lines 8-13, 39-42.

It would have been obvious to combine the teachings of Matsushita et al within the system of Caputo et al because a contactless transmission overcomes the disadvantage of system failure due to bad contact as disclosed in Matsushita et al on column 1, lines 54-60.

With respect to Claim 10, Caputo et al meets all the limitation except the limitation disclosed below.

The limitation of “characterized in that a mixture of wavelengths is used for transmission via the contactless transmission path” is met by Matsushita et al on column 1, lines 8-13 and 39-42.

It would have been obvious to combine the teachings of Matsushita et al within the system of Caputo et al because a contact-less transmission overcomes the disadvantage of system failure due to bad contact as disclosed in Matsushita et al on column 1, lines 54-60.

### *Conclusion*

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tracey Akpati whose telephone number is 703-305-7820. The examiner can normally be reached on 8.30am-6.00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on 703-305-4393. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2135

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

OTA



KIM VU  
SUPERVISOR, PATENT EXAMINER  
TECHNOLOGY CENTER 2100